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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Sung Woo Yang and Chang IJo

Chung

Serial No.: 10/082,188

Filed: February 26, 2002

For: METHOD OF NARROW SEARCH

FOR BOOKS THE INTERNET

Group Art Unit: 2167

Examiner: RAYYAN, SUSAN F

25864

ATENT TRADEMARK DEFICE

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EXAMINER, RAYYAN, SUSAN F

USPTO ART UNIT: 2167

FACSIMILE NO.: (571) 273-8300

Dated: July 18, 2005

PRELIMINARY AMENDMENT

Mail Stop RCE Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 4 of this paper.

To: USPTO

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

- 1. (Currently amended) A method of narrow search for books on the Internet comprising the steps of:
 - (a) under control of a vendor server system, storing book identifying information in a main database;
 - (b) under control of a customer system, <u>providing a displaying means</u> for entering a search term;
 - (c) under control of the vendor server system, in response to the search term entered by the customer in the means for entering a search term, accessing the main database to match the search term with the book identifying information and retrieve a search result comprising the book identifying information matching the search term;
 - (d) under control of the vendor server system, storing the search result in a narrow database;
 - (e) under control of a the customer system, displaying the search result and the means for entering a narrow search term;
 - (f) under control of the vendor server system, in response to the narrow search term entered by the customer in the means for entering a narrow search term, accessing the narrow database to match the narrow search term with the book identifying information and

retrieve a narrow search result comprising the book identifying information matching the narrow search term;

- (g) under control of the vendor server system, storing the narrow search result in the narrow database;
- (h) under control of a customer system, displaying the narrow search result and means for entering a narrow search term; and
- (i) if the narrow database is not exhausted or a desired book is not located repeating steps
 (f), (g) and (h) until either the narrow database is exhausted or a the desired book is located.
- 2. (Currently amended) A method as in claim 1, wherein said book identifying information further comprises an international standard book number.
- 3. (Currently amended) A method as in claim 1, wherein said book identifying information further comprises a title.
- 4. (Currently amended) A method as in claim 1. wherein said book identifying information further comprises an author.
- 5. (Currently amended). A method as in claim 1, wherein said book identifying information further comprises a subject.

REMARKS

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The office action of January 19, 2005 has been reviewed and its contents carefully noted. Reconsideration of this case, as amended, is requested. Claims 1 through 5 remain in this case.

Rejection(s) under 35 U.S.C. §102

Claims 1-5 were rejected under 35 U.S.C. 102(b) as being anticipated by Bowman, et al.. 6,169,986. Applicants respectfully disagree with the rejection.

Bowman teaches a suggestive search engine which suggests related terms to the user to allow the user to refine a search. The related terms are generated using query term correlation data which reflects the frequencies with which specific terms have previously appeared within the same query. The correlation data is generated and stored in a look-up table using an offline process which parses a query log file. The table is regenerated periodically from the most recent query submissions (e.g., the last two weeks of query submissions), and thus strongly reflects the current preferences of users. Each related term is presented to the user via a respective hyperlink which can be selected by the user to submit a modified query. In one embodiment, the related terms are added to and selected from the table so as to guarantee that the modified queries will not produce a NULL query result. (Emphasis added)

In the prior, Final Rejection, the Office Action states, inter alia

Applicant[s] argues Bowman et al (US 6,169,986) does not teach the limitation [that] the narrow search term is entered by the customer however Examiner respectfully disagrees. Bowman teaches this limitation at col. 14, lines 26-36. Bowman teaches a user selecting a hyperlink "outdoor trail-bike and the search engine performing the search which is essentially the same as a customer entering the search term. ... Bowman provides two means for [a] user to enter a narrow search term. (Emphasis added)

The relevant paragraph (i.e. col. 14, lines 26-36) cited by the Examiner is listed below for her benefit.

FIG. 9 illustrates a sample query result page 900 in which a user has performed a subject field search on the terms "OUTDOOR TRAIL" and has received a set of three related terms, each of which is incorporated into a respective hyperlink 910. The page will also typically contain a listing of the query result items 920. If the user clicks on the hyperlink "OUTDOOR TRAIL--BIKE," the search engine will perform a search using the terms "S-OUTDOOR," "S-TRAIL," and "S-BIKE," and will then return the associated items. The query result page 900 may also have search fields (not shown) for allowing the user to edit the query. (Emphasis added)

Applicants respectfully disagrees with the Office Action's assertion and submits that the essence of Bowman's teachings include providing a search refinement system and method for generating and displaying related query terms ("related terms"). In accordance with the invention, the related terms are generated by using query term correlation data that is based on historical query submissions to the search engine. The query term correlation data ("correlation data") is preferably based at least upon the frequencies with which specific terms have historically been submitted together within the same query. The incorporation of such historical query information into the process tends to produce related terms that are frequently used by other users in combination with the submitted query terms, and significantly increases the likelihood that these related terms will be helpful to the search refinement process. To further increase the likelihood that the related terms will be helpful, the correlation data is preferably generated only from those historical query submissions that produced a successful query result (at least one match).

Claim I recites, inter alia

- A method of narrow search for books on the Internet comprising the steps of:
- (a) under control of a vendor server system, storing book identifying information in a main database;

- (c) under control of the vendor server system, in response to the search term entered by the <u>customer</u> in the means for entering a search term, accessing the main database to match the search term with the book identifying information and retrieve a search result comprising the book identifying information matching the search term;
- (i) if the narrow database is not exhausted or a desired book is not located repeating steps (f), (g) and (h) until either the narrow database is exhausted or a the desired book is located.

As can be seen, claim 1 does NOT use related terms such as bike, etc. In other words, the "outdoor trail-bike hyperlink is NOT the same as a customer entering a search term since the hyperlink includes, at least in part, historical query submissions to the search engine which are frequently used by <u>other users</u> and may NOT be submitted by a current costumer. On the other hand, Bowman uses <u>related terms</u> generated using query term correlation data which reflects the <u>frequencies</u> with which specific terms have <u>previously</u> appeared within the same query. As stated supra, the "outdoor trail-bike hyperlink example cited by the Examiner is an exemplified case of related terms described in Bowman, in which related terms other than whatever search term entered by the customer is used. Therefore, the user selecting a hyperlink "outdoor trail-bike and the search engine performing the search which is NOT the same as a customer entering the search term at least for the simple reason that the customer does not know about the hyperlinks, and has NO intention of entering a related term (bike) until the same is offered for her selection.

At least Bowman does not teach or suggest the under control of a vendor server system, storing book identifying information in a main database. Neither does Bowman teach or suggest (c) under control of the vendor server system, in response to the search term entered by the

customer in the means for entering a search term, accessing the main database to match the search term with the book identifying information and retrieve a search result comprising the book identifying information matching the search term, nor does Bowman teach or suggest if the narrow database is not exhausted or a desired book is not located repeating steps (f), (g) and (h) until either the narrow database is exhausted or the desired book is located; as recited in claim 1.

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Therefore, it is respectfully submitted that the rejection of independent claim 1 as being anticipated by *Bowman* is overcome. Dependent claims 2-5 being dependent upon and further limiting independent claim 1, should also be allowable for that reason, as well as for the additional recitations they contain. Reconsideration and withdrawal of the rejection are respectfully requested.

To: USPTO

Conclusion

Applicant believes the claims, as amended, are patentable over the prior art, and that this case is now in condition for allowance of all claims therein. Such action is thus respectfully requested. If the Examiner disagrees, or believes for any other reason that direct contact with Applicants' attorney would advance the prosecution of the case to finality, he is invited to telephone the undersigned at the number given below.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file."

Respectfully submitted,

WU & CHEUNG, LLP

Dated: July 18, 2005

98 DISCOVERY

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